UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,581	03/18/2004	Kenneth L. Levy	P0956	7267

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EXAMINER
STRONCZER, RYAN S

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/804,581	LEVY ET AL.
	Examiner	Art Unit
	Ryan Stronczer	2623

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 May 2008</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-29</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>18 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendment to the specification, filed 23 May 2008, with respect to claim 23 has been fully considered; the rejection of claim 23 under 35 U.S.C. 112 has been withdrawn.

Response to Arguments

Applicant's arguments with respect to claims 1 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the functionality recited in claim 23 that "the identifier is used to notify a network operator that network content is not properly synchronized with the broadcast content" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next

Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

**Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being
indefinite for failing to particularly point out and distinctly claim the subject
matter which applicant regards as the invention.**

Claim 26 recites the limitation "wherein the identifiers are decodable by

consumer devices to link the consumer devices to network content." There is

insufficient antecedent basis for this limitation in the claim as the recited "consumer

devices" are not recited in previous claims, nor is the term defined in the specification of

the instant application. For the purposes of applying prior art in this Office Action, the

functionality recited in claim 26 will be considered to be consistent with that of claim 16

which recites that "the extracting of the identifier used to generate the request is

performed on the user's device."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 5-8, 11-16, 18, 20-24, and 26-29 are rejected under 35

U.S.C. 103(a) as being unpatentable over Ullman et al. (US Pat. No.: 6,018,768) and

further in view of Carro (Pub. No.: US 2004/0139474).

As to claim 1, Fig. 2 of Ullman teaches the recited method of synchronizing

broadcast content with dynamic network content at a network address. Regarding the

first step of "extracting an identifier embedded in broadcast content," Fig. 2 of Ullman

teaches that "*the URL decoder 24 is located at the server site, as opposed to the*

subscriber location. When the decoder 24 receives the video program signal, it strips

out the URL codes on line 21 of the VBI and delivers these codes independently to an

Internet server 28" (col. 5/lines 62-67). The recited second step of "using the identifier

to identify corresponding network content" is inherent in the system of Fig. 2 as the

extracted identifier is the URL for corresponding network content.

As to the recited "after the corresponding network content thereby has been

identified, posting the corresponding network content on a network device located at the

network address, the network device being responsive to requests sent to the network

address to provide the network content over a network; wherein the broadcast content

is synchronized with the corresponding network content," Ullman teaches that internet

server **28**—equivalent to the recited "network device located at the network address"—

receives the decoded URL which is *"subsequently delivered over the Internet* [from

server 28] *to the user's PC **16**."* (col. 6/lines 1-2) but does not explicitly teach that said

network content "posted" to the server, as claimed. Fig. 2 of Carro teaches an

analogous system for synchronizing broadcast content with corresponding network

content in which channel information server **309** stores a log (Fig. 7) of URLs

corresponding to broadcast information, chronologically synchronized with the video

program and available to the user at channel information server URL **701**. It would

have been obvious to one of ordinary skill in the art at the time of the invention to

incorporate the channel information server and universal time table taught by Carro into

internet server **28** taught by Ullman to keep a record of the URLs extracted by server

URL decoder **26** and that would be available to the user at a fixed network address

(URL **701**). This would have been desirable so as to allow the user to have access to

all the network content transmitted with a given program at a fixed address.

As to claim 2, Ullman teaches that the URLs transmitted with the video program

are embedded into the vertical blank interval of the video program (col. 4/lines 59-62).

As to claim 5, the recited "wherein the identifier triggers automatic posting of the

corresponding network content" is inherent in the system of Fig. 2.

As to claim 6, the recited "wherein the dynamic network content comprises sets of HTML content, each set corresponding to a particular item, each set being prepared prior to broadcast of programs relating to the particular items" is inherent in the system taught by Ullman and Carro. The universal time table **701** taught by Carro (see Carro, Fig. 7) is presented to the user as a table embedded in a website (available at the channel information server URL) which is updated as each URL is decoded from the video program by the URL decoder **26** (Ullman, Fig. 2). Updating table **701** inherently requires updating the HTML code to include the decoded URL and posting the updated table at the network address (e.g., the channel information server URL).

As to claim 7, it would have been obvious to one of ordinary skill in the art at the time of the invention to the URLs transmitted by Ullman could be links to purchase the items. Indeed, Ullman teaches that *"the act of purchasing a product seen on television can be streamlined—the consumer can be given the choice of buying the product instantly using the two-way capabilities of the system"* (col. 2/lines 37-40). As to the limitation that "the programs comprise shopping programs that are broadcast to sell the products or services," the systems of Ullman and Carro are designed to work with any broadcast program including paid promotional programming or "infomercials."

As to claim 8, the rejection of claim 6 is incorporated herein. The systems of Ullman and Carro are designed to work with any broadcast program including live broadcasts. The recited synchronization of broadcast content and network content is inherent in the systems of Ullman and Carro.

As to claim 11, the recited functionality "wherein the identifiers enable synchronizing of dynamic network content accessed by users at a single URL, and also provide a link to network information about the broadcast content" is inherent in the system taught by Ullman and Carro. Users can go to the channel information URL taught in Fig. 4 and 7 to see a dynamically updated list of the URLs embedded in the video program and utilize said links to view the associated network content. The hyperlink information **702** taught by Carro is equivalent to the recited link and the HTML content corresponding to hyperlink information 702 is equivalent to the "network information."

As to claim 12, clicking on—or otherwise selecting—the hyperlink information **702** taught by Carro is equivalent to the recited "request from the user" and will inherently cause the system to display the associated content.

As to claims 13 and 14, Ullman (cited above) teaches that the system can be used to conduct transactions and purchase products seen on television. It would have been obvious to one of ordinary skill in the art at the time of the invention that the URLs embedded in the video program could point to a website where the user can purchase the product shown in the associated broadcast.

As to claim 15, the user cannot select the embedded hyperlink information **702** until it has been extracted from the broadcast.

As to claims 16 and 18, Fig. 5 and 6 of Ullman teach an embodiment in which the extraction is performed at the user's digital cable box **140**.

As to claim 20, it would have been obvious to one of ordinary skill in the art at the time of the invention that a user's device would provide information about itself to ensure that the information returned is in a format the device is capable of displaying. It is desirable and necessary for a device to provide such information so that requested information can be displayed to the user in a readable format.

As to claim 21, Ullman teaches, regarding Fig. 2, *"The above embodiment can also enable personalization in the form of unique series of URLs specific to each user's unique profile"* (col.7/lines 12-14).

As to claim 22, Examiner takes Official Notice that it is well known in the art for a user's device such as a set top box to supply an account number to a source of network content to facilitate a transaction (e.g., purchasing video on-demand content). It would have been obvious to one of ordinary skill in the art at the time of the invention to extend this functionality to purchases made at sites corresponding to the embedded content identifiers.

As to claim 23, the recited functionality "wherein the identifier is used to notify a network operator that network content is not properly synchronized with the broadcast content" is inherent in the system taught by Carro. Since the universal time-table **701** taught by Carro is not updated until after the identifier and corresponding URL has been extracted, the extraction of the new identifier which necessitates the updating of table inherently notifies the network operator that the network content (e.g., table 701) is not properly synchronized with the broadcast content and thus needs to be updated.

As to claim 24, the rejection of claim 1 is incorporated herein. As to the recited

"database associating web content identifiers with corresponding web content relating to

items that are subjects of broadcast programming," Carro teaches that the channel

information server *"searches into its database the hyperlinks GPS-time intervals 1103*

and identifies the hyperlinks 1104 and 1105 associated with selected GPS-times"

[0108]. The recited "embedder for embedding the web content identifiers into broadcast

programs, the embedder using the items that are subjects of the broadcast

programming to select web content identifiers for embedding into the broadcast

programming" is equivalent to the URL encoder taught by Ullman (Fig. 2, element 8).

The recited "web site control operative to extract the web content identifiers and ensure

that the corresponding web content is posted at said URL when corresponding

broadcast programming is broadcast," is inherent in extracting the URL from the video

broadcast and updating universal time table **701** of Carro.

As to claim 26, Fig. 5 and 6 of Ullman teach an embodiment in which the

extraction is performed at the user's digital cable box **140**.

As to claim 27, Carro teaches that the channel information database can be

searched by timestamp to find the URL corresponding to the associated item [0108] but

does not explicitly teach that the URL can be located by searching the database for the

item name. Fig. 7 of Carro teaches that the database contains a timestamp, link name,

and link URL. It would have been obvious to one of ordinary skill in the art at the time of

the invention that the encoder taught by Ullman could encode any text into the VBI of

the broadcast program, including item name, as recited, and that the appropriate

network content or URL could be located in the database taught by Carro by using an item name query instead of the timestamp query taught by Carro.

As to claim 28, Ullman teaches that the encoder encodes a URL associated with the content featured in the live broadcast. The URL taught by Ullman is equivalent to the recited "a web content identifier."

As to claim 29, the systems taught by Ullman and Carro are inherently capable of working with live broadcast television. As to the recited pre-recorded programming, Fig. 19-31 of Carro teach an analogous embodiment which is synchronizes network content with recorded broadcast content during playback of said recorded content.

Claims 3, 4, 9, 10, 19, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ullman in view of Carro as applied to claims 1 and 24 above, and further in view of Levy et al. (Pub. No.: US 2002/0162118).

As to claim 3, Ullman and Carro teach that the system can imperceptibly encode a URL or identifier into a broadcast, but do not explicitly teach the recited "video watermark." In an analogous system for synchronizing network content with corresponding broadcast content, Levy teaches, *"[t]he content ID...is preferably embedded within the content via digital watermarking technology or other steganographically [sic] embedding method"* [0014]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the watermarking technique taught by Levy in the encoding system taught by Ullman and Carro to take advantage of advances in digital broadcasting technologies.

As to claim 4, Levy teaches that the network content identifier is embedded in the broadcast content prior to being distributed to the user. Levy teaches, "[t]he term 'content' is defined broadly herein to include audio, video, text, graphics, and/or still images...[also] audio signals, video signals, text, movies, commercials, advertisements, programming (both TV and computer programming), scripting, and so forth" [0032], thus it would have been obvious to one of ordinary skill in the art at the time of the invention that the watermark taught by Levy could be embedded in the audio portion of a program as well as the video portion.

As to claim 25, the recited video and audio watermarks are taught by Levy as applied to claims 3 and 4, respectively.

As to claims 9 and 10, Carro teaches that the system *"relates generally to techniques for integrating broadcast and computer systems, and more particularly to a system and a method for enhancing radio or television programs"* [0001]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the audio watermarks taught by Levy to embed content identifiers in the audio of a radio program to enable enhancement of radio programs, as taught by Carro.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ullman in view of Carro and Levy as applied to claims 3, 4, 9, and 10 above, and further in view of Linnartz et al. (Pub. No.: US 2002/0152388).

As analyzed above, Ullman, Carro, and Levy teach that the extraction of the network content identifier from the broadcast content can take place at the user's

device, but do not explicitly teach that the user's device can be a cell phone, as recited.

Linnartz teaches an analogous method for extracting a digital watermark from an audio

signal using a cellular telephone phone [0049-53]. Examiner takes Official Notice that it

is well known in the art for a cellular telephone to have Internet access that would allow

it to view the corresponding network content and to have the capability to receive

broadcast digital video and audio signals. It would have been obvious to one of

ordinary skill in the art at the time of the invention to combine the watermark extractor

taught by Levy with the cell phone taught by Linnartz to enable a user to decode

embedded watermarks in content received on a cellular telephone. This would have

been desirable to allow advertisers to take advantage consumers who receive audio

and video content on their cell phones who represent a growing and largely untapped

source of advertising revenue.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Stronczer whose telephone number is (571) 270-3756. The examiner can normally be reached on 7:30 AM - 5:00 PM (EDT), Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571) 272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan Stronczer/
Examiner, Art Unit 2623

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